

## AMENDMENTS TO THE CLAIMS

1 - 38. (Canceled).

39. (Previously Presented) A method of satisfying a resource request in a computer system for configuring systems, the method comprising:  
instantiating in the computer system a configuration instance from a configuration model, wherein the configuration model includes a defined structural hierarchy of elements and a plurality of resources offered by elements in the structural model hierarchy;  
(a) examining the configuration instance for one of the elements offering a resource in response to a request for the resource, wherein the resource offered by at least one of the elements in the structural model hierarchy represents a pool of resources;  
(b) selecting the element when the resource offered by the element has not been previously consumed;  
(c) selecting a newly created element instance that offers the resource if no existing elements satisfy the resource request; and  
(d) repeating (a) through (d) when the element selection does not satisfy the resource request.

40. (Canceled).

41. (Currently Amended) The method of claim [40] 39 wherein each element offering a resource that includes a pool of resources is a structural superior in the structural model hierarchy to an element consuming the resource.

42. (Currently Amended) The method of claim [40] 39 wherein a plurality of the resources in the pool of resources combine to satisfy the resource request.

43. (Currently Amended) The method of claim [40] 39 wherein one of the resources in the pool of resources satisfies the resource request.

1           44.     (Currently Amended) The method of claim [40] 39 wherein the element offering  
2 the resource includes multiple power supplies whose combined power supply capacity is pooled  
3 to provide the requested resource.

4           45.     (Previously Presented) The method of claim 39 wherein the combination of  
5 multiple like resources comprises resources inherited from at least one other element.

1           46.     (Previously Presented) The method of claim 45 wherein each element offering a  
2 resource includes resources inherited from at least one other element is a structural superior in  
3 the structural model hierarchy to an element consuming the resource.

1           47.     (Previously Presented) The method of claim 45 wherein a plurality of the  
2 resources inherited from at least one other element combines to satisfy the resource request.

1           48.     (Previously Presented) The method of claim 45 wherein one of the resources  
2 inherited from at least one other element satisfies the resource request.

1           49.     (Previously Presented) The method of claim 39 wherein the configuration  
2 instance is empty when a new configuration is being defined and the configuration instance  
3 includes an existing configuration when an existing system is being updated.

1           50.     (Previously Presented) An apparatus for configuring systems comprising:  
2 a processor;  
3 a memory coupled to the processor;  
4 a model stored in the memory, wherein elements included in the model are defined in a  
5 structural model hierarchy and each of the elements offers one or more resources;  
6 a configuration engine, stored in the memory and executable by the processor, to satisfy a  
7 resource request using a resource offered by one of the elements, wherein the  
8 configuration engine includes code executable by the processor for:  
9 instantiating in the computer system a configuration instance;

10 (a) examining the configuration instance for one of the elements offering a  
11 resource in response to a request for the resource, wherein the resource  
12 offered by at least one of the elements in the structural model hierarchy  
13 represents a pool of resources;  
14 (b) selecting the element when the resource offered by the element has not been  
15 previously consumed;  
16 (c) selecting a newly created element instance that offers the resource if no  
17 existing elements satisfy the resource request; and  
18 (d) repeating step (a) through (d) when the element selection does not satisfy the  
19 resource request.

1 51. (Canceled).

1 52. (Currently Amended) The ~~method~~ apparatus of claim ~~51~~ 50 wherein each  
2 element offering a resource that includes a pool of resources is a structural superior in the  
3 structural model hierarchy to an element consuming the resource.

1 53. (Currently Amended) The ~~method~~ apparatus of claim ~~51~~ 50 wherein a plurality  
2 of the resources in the pool of resources combine to satisfy the resource request.

1 54. (Currently Amended) The ~~method~~ apparatus of claim ~~51~~ 50 wherein one of the  
2 resources in the pool of resources satisfies the resource request.

1 55. (Currently Amended) The ~~method~~ apparatus of claim ~~51~~ 50 wherein the element  
2 offering the resource includes multiple power supplies whose combined power supply capacity is  
3 pooled to provide the requested resource.

4 56. (Currently Amended) The ~~method~~ apparatus of claim ~~51~~ 50 wherein the  
5 combination of multiple like resources comprises resources inherited from at least one other  
6 element

1           57.     (Currently Amended) The ~~method~~ apparatus of claim 50 wherein each element  
2 offering a resource includes resources inherited from at least one other element is a structural  
3 superior in the structural model hierarchy to an element consuming the resource.

1           58.     (Currently Amended) The ~~method~~ apparatus of claim 57 wherein a plurality of  
2 the resources inherited from at least one other element combines to satisfy the resource request.

1           59.     (Currently Amended) The ~~method~~ apparatus of claim 57 wherein one of the  
2 resources inherited from at least one other element satisfies the resource request.

1           60.     (Currently Amended) The ~~method~~ apparatus of claim 50 wherein the  
2 configuration instance is empty when a new configuration is being defined and the configuration  
3 instance includes an existing configuration when an existing system is being updated.

1           61.     (Previously Presented) An article of manufacture comprising code encoded  
2 therein and executable by a processor to cause the processor to:  
3         instantiate in the computer system a configuration instance from a configuration model,  
4                 wherein the configuration model includes a defined structural hierarchy of  
5                 elements and a plurality of resources offered by elements in the structural model  
6                 hierarchy;  
7         (a) examine the configuration instance for one of the elements offering a resource in  
8                 response to a request for the resource, wherein the resource offered by at least one  
9                 of the elements in the structural model hierarchy represents a pool of resources;  
10         (b) select the element when the resource offered by the element has not been previously  
11                 consumed;  
12         (c) select a newly created element instance that offers the resource if no existing elements  
13                 satisfy the resource request; and  
14         (d) repeat (a) through (d) when the element selection does not satisfy the resource  
15                 request.

1           62.   (Previously Presented) An apparatus for satisfying a resource request in a  
2 computer system for configuring systems using a resource comprising a combination of  
3 resources comprising:  
4           a processor;  
5           a memory coupled to the processor;  
6           a model stored in the memory, wherein elements included in the model are defined in a  
7           structural model hierarchy and each of the elements offers one or more resources;  
8           means for defining a structural model hierarchy and a plurality of resources offered by  
9           elements in the structural model hierarchy;  
10          means for instantiating in the computer system a configuration instance;  
11          (a) means for examining the configuration instance for one of the elements offering a  
12             resource in response to a request for the resource, wherein the resource offered by  
13             at least one of the elements in the structural model hierarchy represents a pool of  
14             resources;  
15          (b) means for selecting the element when the resource offered by the element has not  
16             been previously consumed;  
17          (c) means for selecting a newly created element instance that offers the resource if no  
18             existing elements satisfy the resource request; and  
19          (d) means for causing (a) through (d) to search for another element to satisfy the resource  
20             request when the element selection does not satisfy the resource request.

1           63.   (New) The article of manufacture of claim 61 wherein each element offering a  
2 resource that includes a pool of resources is a structural superior in the structural model  
3 hierarchy to an element consuming the resource.

1           64.   (New) The article of manufacture of claim 61 wherein a plurality of the  
2 resources in the pool of resources combine to satisfy the resource request.

1           65.   (New) The article of manufacture of claim 61 wherein one of the resources in the  
2 pool of resources satisfies the resource request.

1           66.   (New) The article of manufacture of claim 61 wherein the element offering the  
2 resource includes multiple power supplies whose combined power supply capacity is pooled to  
3 provide the requested resource.

4           67.   (New) The article of manufacture of claim 61 wherein the combination of  
5 multiple like resources comprises resources inherited from at least one other element

1           68.   (New) The article of manufacture of claim 61 wherein each element offering a  
2 resource includes resources inherited from at least one other element is a structural superior in  
3 the structural model hierarchy to an element consuming the resource.

1           69.   (New) The article of manufacture of claim 68 wherein a plurality of the resources  
2 inherited from at least one other element combines to satisfy the resource request.

1           70.   (New) The article of manufacture of claim 68 wherein one of the resources  
2 inherited from at least one other element satisfies the resource request.

1           71.   (New) The article of manufacture of claim 61 wherein the configuration instance  
2 is empty when a new configuration is being defined and the configuration instance includes an  
3 existing configuration when an existing system is being updated.